UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/654,996	09/05/00	TOBINICK, M.D.	E TOBINICK 3.0

HM22/0921

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EXAMINER	
CHANNAVAJJALA,L	
ART UNIT	**PAPER NUMBER**
1615	3

DATE MAILED: 09/21/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No.	Applicant(s)	
	09/654,996	TOBINICK, M.D., EDWARD L.	
	Examiner	Art Unit	
	Lakshmi S. Channavajjala	1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-84* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-84* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *1* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Receipt of preliminary amendment A, dated 9-25-00 is acknowledged.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander et al (US 6,180355, hereafter Alexander) and Christensen, IV (UD S 5602157, Christensen).

Alexander teaches a method of treating a condition associated with elevated levels of cytokine, Tumor Necrosis Factor (TNF), comprising administering a therapeutically effective amount of anti-TNF compound. Alexander teaches the role of TNF in mediating a variety of inflammatory, autoimmune, viral, cerebrovascular, neuronal and other diseases (col. 13-50). In order to inhibit the TNF secretion and provide an effective treatment for TNF associated conditions, Alexander suggests different anti-TNF agents i.e., anti-chemokine compound etanercept (a preferred embodiment of their invention and also claimed in the instant), phosphodiesterase inhibitors, adenosine, soluble TNF receptors, anti-TNF antibodies, synthetic drugs (col. 8 –col.9) etc. Alexander teaches various modes of administration of the anti-TNF antagonists i.e, subcutaneous, parenteral, intramuscular etc. While Alexander discuss the role of TNF in mediated diseases such as AIDS, viral infection, disorders of central nervous system, but

does not specifically teach some of the claimed conditions such as neuralgia, epilepsy, viral meningitis, Reye's syndrome, Meniere's disease etc.

Christensen teaches inhibition of TNF and thus a method of treatment for TNF associated viral, fungal and other allergic and inflammatory diseases. The viral diseases include HIV, influenza, herpes, cytomegalovirus, adenovirus etc.

Accordingly, it would have been obvious for a skilled artisan to use any or all of the anti-TNF agents (i.e., anti-TNF antibodies, etarnercept or other other endogenous mediators or synthetic drugs (of Alexander) for the inhibition of TNF secretion and thus provide an effective treatment in a variety of conditions or diseases associated because both Alexander and Christensen suggest that TNF secretion plays an important role in the above diseases. Although the references do not teach all of the conditions claimed, a skilled artisan would be motivated to use the anti-TNF approach of Alexander, to any of the TNF associated diseases and conditions, i.e., use anti-TNF agent such as etanercept, with an expectation to successfully inhibit the production of TNF and thus provide an effective treatment. Further, the claimed amounts and modes of administration are within the scope of a skilled artisan because determining the optimum amount of the therapeutic agent and the best mode of administration with an expectation to achieve optimum effect is well known in the art.

Claims 49-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander et al (US 6,180355, hereafter Alexander) and Christensen, IV (UD S 5602157, Christensen) as applied to claims 1-48 above, and further in view of Andrulis Jr. et al. (US 6001828, hereafter Andrulis).

Alexander and Christensen fail to teach the claimed combination of anti-TNF agents for treating TNF mediated diseases.

Andrulis teaches compositions comprising a combination of TNF inhibitors and antiretroviral agents such as reverse transcriptase inhibitors, protease inhibitors, cell virus binding inhibitors etc., for the treatment of HIV infection and AIDS because of implications of TNF in the growth of HIV (cols. 1 and 3-5). Accordingly, it would have been obvious for a skilled artisan at the time of the instant invention to combine two or more anti-TNF agents and use for the inhibition of TNF secretion and the TNF associated conditions or diseases with an expectation to achieve an additive effect. The motivation to optimize the amounts of therapeutic agents and choosing the mode of administration has been discussed above.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-84 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-29 of U.S. Patent No. 6,177,077. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed method inhibiting the action of TNF is within the scope of the patented claims, which

are also directed to a method of inhibiting TNF. The phrase "for the treatment" is not a positive limitation.

Claims 1-84 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-47 of U.S. Patent No. 6,015,557. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed method inhibiting the action of TNF is within the scope of the patented claims, which are also directed to a method of inhibiting TNF. The phrase "for the treatment" is not a positive limitation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lakshmi S. Channavajjala whose telephone number is 703-308-2438. The examiner can normally be reached on 7.30 AM -4.00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K Page can be reached on 703-308-2927. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7921 for regular communications and 703-308-7921 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.

Lakshmi Channavajjala
September 20, 2001

THURMAN K. PAGE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600